

ABSTRACT

Disclosed is a method of manufacturing semiconductor devices. In the process of simultaneously forming a high voltage device and a low voltage device, a photoresist film for patterning a gate oxide film in a high voltage device is removed in
5 a wet mode using a solvent. The polysilicon film used as the gate electrode is then formed without applying a vacuum. It is thus possible to increase reliability of the gate oxide film, and prevent damage of the gate oxide film due to ozone plasma and penetration of a grain protrusion of the polysilicon film into the gate oxide film. Accordingly, the breakdown voltage characteristic of the gate oxide film is improved.